

Pellet Paint Co-Precipitant

1998 - 1999 Catalog

ORDERING INFORMATION

| Product | Size | Cat. No. | Price |
|-----------------------------|---------|----------|-------|
| Pellet Paint Co-Precipitant | 125 rxn | 69049-3 | \$45 |

Components:

- 250 µl Pellet Paint Co-Precipitant
- 1 ml 3 M Sodium Acetate, pH 5.2

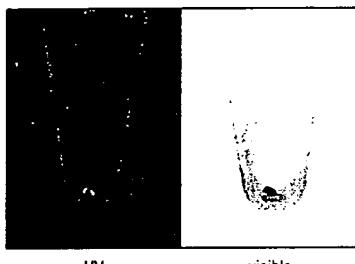
Additional Information Available

| | |
|-----------------------|----------|
| Pellet Paint Protocol | TB146 |
| inNovations | No. 4, 5 |

Pellet Paint™ Co-Precipitant* is a visible dye-labeled carrier formulated specifically for use in alcohol precipitation of nucleic acids (1). The five minute precipitation protocol requires no low temperature incubations or prolonged centrifugation. Both RNA and DNA are efficiently precipitated from even the most dilute solutions (2 ng/ml) and the pellet is easily located by its vivid pink color. The pellet can be easily followed during washing steps and prevents losses during handling. Pellet Paint is compatible with most molecular biology procedures and is free of contaminating nucleic acids and nucleolytic enzymes. Although Pellet Paint absorbs in the UV range, accurate spectrophotometric measurements of DNA or RNA samples are possible; the absorbance ratio (provided with each package of Pellet Paint) can be used as a correction factor when determining nucleic acid concentration (2). Not recommended for use with PE Applied Biosystems automated sequencers.

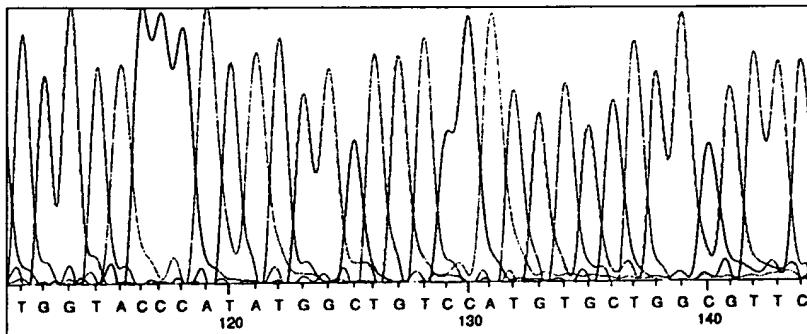
1. McCormick, M. (1995) *inNovations* 4, 10-11.
2. McCormick, M. (1996) *inNovations* 5, 10.

Pellet Paint pellets



Pellet Paint pellet (2 µl) under UV and visible illumination.

Automated sequencing with Pellet Paint



A double stranded plasmid template (5 µg) was precipitated with Pellet Paint, denatured with alkali, neutralized and sequenced with a Cy5 labeled primer on a Pharmacia ALF Express sequencer. The sequence was readable to more than 500 bases, which was the same as a control reaction performed in the absence of Pellet Paint. (Data courtesy of M. Domanico, Pel-Freez.)

Comparison of different carriers for precipitation of nucleic acids

| | Pellet Paint | glycogen | tRNA |
|-------------------------------|--------------|----------|------|
| compatible with: | | | |
| gel electrophoresis | ✓ | ✓ | - |
| PCR amplification | ✓ | ? | - |
| DNA sequencing | ✓ | ✓ | - |
| restriction digestion | ✓ | ✓ | ✓ |
| ligation | ✓ | ✓ | ? |
| transformation | ✓ | ? | - |
| cDNA synthesis | ✓ | ? | - |
| kinase reactions | ✓ | ✓ | - |
| random priming | ✓ | ? | - |
| <i>in vitro</i> transcription | ✓ | ✓ | ? |
| <i>in vitro</i> translation | ✓ | ✓ | ✓ |
| RNase protection assay | ✓ | ? | ✓ |
| phenol extraction | ✓ | ✓ | ✓ |
| LiCl precipitation | ✓ | ✓ | - |
| bacterial electroporation | ✓ | ? | ? |
| PEG precipitation | ✓ | ? | ? |

Recovery of various RNA and DNA samples with Pellet Paint as the carrier

| Sample | Incorp. cpm recovered |
|----------------------------|-----------------------|
| RNA (100 nt, 0.2 ng/µl) | 90% |
| RNA (1000 nt, 0.2 ng/µl) | 92% |
| RNA (10,000 nt, 0.2 ng/µl) | 89% |
| DNA (100-2000 bp, 4 pg/µl) | 86% |

The indicated samples of 32 P-labeled RNA and DNA were prepared using standard protocols for *in vitro* transcription and random priming, respectively. Following the labeling reactions, incorporation was determined by DE81 filtration. Known amounts of incorporated material (300,000 cpm) were precipitated in the presence of Pellet Paint. Samples without Pellet Paint resulted in a 5-50-fold reduction in recovery.

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* patent pending